

ABSTRACT OF THE DISCLOSURE

A signal transmission apparatus for a digital modulation type, wherein each of information codes is assigned to any one of a plurality of signal points arranged on an I-Q complex plane, a pilot signal used for demodulating said information codes and an auxiliary signal are assigned to be arranged on signals points on the I-Q complex plane, a signal modulated based on coordinates corresponding to the assigned signal points is transmitted, the transmitted signal is received, and the received signal is demodulated to reproduce the information codes, and wherein the signal points of said auxiliary signal and said pilot signal are arranged on different positions on said I-Q complex plane.